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10/705,733	11/10/2003	Thomas C. Mercer	59360US002	4297

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EXAMINER	
LAI, ANNE VIET NGA	
ART UNIT	**PAPER NUMBER**
2612	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/705,733	MERCER ET AL.	
	Examiner	Art Unit	
	Anne V. Lai	2612	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12 April 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-35* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) *12-16* is/are allowed.

6)☒ Claim(s) *1-11, 17-35* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. Claim 27 is objected to because of the following informalities:

In claim 27, third line, the word "are" in "the protected are is authorized" should be changed to - - area - -. Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 23-25, 27-28 and 32 are rejected under 35 U.S.C. 102(e) as being anticipated by **Fukuoka** (previously provided).

In claim 23, **Fukuoka** discloses a computer-readable medium (par. 45) comprising instructions to cause a processor to selectively interrogate RFID tags in a corridor (fig. 1); simultaneously receive a response from all tags having a selected value in a specified memory (gate processing, multiple tag access processing with AFI set to 81, par. 190-193, 197); and detect at least one RFID tag having the selected value in the specified memory location if at least a partial response is received (response with no UID or tag information, par. 192-193 & 197) (also a completed response can be considered comprising at least a partial response).

In claim 24, Fukuoka discloses alarm as claimed (par. 197).

In claim 25, Fukuoka discloses all tags having the selected value at the specified memory location (AFI=81) respond to the interrogation the same time.

In claims 27-28, Fukuoka discloses the specified value indicates whether the article removal from the protected area is authorized, and alarm is generated if unauthorized removal is detected (par. 197).

In claim 32, Fukuoka discloses a method as claimed (partial response and alarm) (the user runs through the gate and the UID and tag information cannot be acquired, par. 192; illegal book taken-out may be determined using AFI without executing EAS check command, par. 193, 197).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 1-11, 26, 29-30, 33 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Fukuoka** in view of **Shuey** (previously provided).

In claim 1, **Fukuoka** discloses a method comprising interrogating RFI tags having a selected value in a specified memory location (AFI=81); simultaneously receiving a response from tags; and detecting at least a tag having the selected value if at least a partial response is received (fig. 8 shows a command for checking an AFI and

an expected response having SOF and UID; and paragraphs 190-193, 197 disclose a gate processing with AFI=81 or EAS check, the receive response can be accepted without tag's UID or information).

Fukuoka may omit the word "valid response", however an ordinary skill in the art would obviously prefer not accepting a response if it is not valid; **Shuey** teaches validity checking for received response in data communication (col. 4, l. 58-67; col. 7, l. 43- col. 8, l. 7). It would have been obvious to an ordinary skill in the art at the time the invention was made, a received response would always be validate for its reliability in digital data communication.

In claims 2-9, **Fukuoka** discloses sending an AFI command having an AFI value set to a selected value (81, check-in value) and generating alarm as claimed (par. 192-193, 197).

In claims 10-11, **Fukuoka** discloses a response having less than all expected information can be accepted (par. 192) and **Shuey** teaches determining the response validity by analyzing whether the start-of-frame and signal strength are valid, if SOF and signal strength not valid then there is no need to look at the data field (detect a preamble and a start frame and determine the preamble signal strength is above threshold; col. 4, l. 58- col. 6, l. 20; col. 7, l. 43- col. 8, l. 7). In view of Fukuoka and Shuey teaching, it would have been obvious to an ordinary skill in the art, a partial response with valid SOF can be consider a valid response to AFI check, no need to analyze all the received response.

In claims 26, 29, 30 and 33, **Shuey** teaches in digital communication, the received data needs to be validated by verifying the presence of a valid start of frame (col. 4, l. 58-67; col. 7, l. 43- col. 8, l. 7). Obviously if the response data is not valid then there is no tag having the specified value at the interrogation corridor.

In claim 35, Fukuoka and Shuey combined disclose a portion of the received response can be processed and validated without validating a remaining of the received response (Fukuoka's multiple tag access and collision processing, par. 192-193, 197; Shuey, validating the received signal; col. 4, l. 58-67; col. 7, l. 43- col. 8, l. 7).

6. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Fukuoka** combined **Shuey** in view of **Ginter** (previously provided).

In claim 17, Fukuoka combined does not disclose creating a key for destroy command. Ginter teaches creating a key for destroy command (col. 57, l. 30-51). It would have been obvious to an ordinary skill in the art, implementing a destroy command feature provide the user the ability to destroy sensitive information within an electronic article when it is subject to theft or tampering therefore optimum security.

7. Claims 18-22 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Fukuoka,** or in the alternative, as obvious over **Stegmaier** [US 2002/0180587] in view of Fukuoka.

In claim 18, **Fukuoka** discloses a method comprising interrogating RFID tags in a corridor to identify those tags having a selected value in a specified memory location (UID; par. 150-151); simultaneously receiving a response from all tags in the corridor; detecting collision in least one bit of the specified memory location (par. 151-154); and

determining that at least one RFID tag having the selected value in the specified memory location is in the corridor if a collision is detected (tag A and tag B having value of 1 in area 0, fig. 12A-12B) (fig. 10, 11, 12A-12B and related specifications, par. 164). Fukuoka discloses reading tag ID; obviously the check for collision can be applied to the 8 bits memory location of EAS or AFI as design choice.

In claim 18, **Stegmaier** teaches interrogating RFID tags for a 8 bits identifier in the ID memory location to identify the tags having a selected value in the memory location; simultaneously receiving a response from all of the RFID tags; detecting a collision in at least one bit of the specified memory location; and detecting at least one tag having the selected value in the specified memory location if a collision is detected (fig. 4, par. 24). Stegmaier does not state interrogation at the corridor however it would have been obvious to an ordinary skill in the art the interrogation corridor is a place within the interrogating field of an electronic interrogator as the one disclosed by Fukuoka.

In claim 19, **Stegmaier** shows in figure 4 detecting collision in one bit of the specified memory location (par. 24).

In claim 20, **Stegmaier** combined teaches if collision is detected determining the value of the memory content of the received response (par. 24, specific treatment for assessing the full digital information); **Fukuoka** teaches the memory content can have a specific value that needs to be detected for a specific purpose (book has a check-in value, illegal taken out) (checking the value of EAS (0, 1) in the last bit of memory location, fig. 9C; value of AFI (0001 or 0010) in the low order bits, figs. 6C-6D);

therefore in multiple tags simultaneous response even when collision is detected a value in a specific memory location can be read for a particular purpose.

In claim 21, **Stegmaier** teaches information transmitted by the tag is protected by some type of checksum based in CRC algorithm for data reliability (par. 32); It would have been obvious if the response indicates that the specific memory location contains the selected value, a validity check would have been performed to confirm the validity of the response and the presence of at least one tag having the selected value in the selected value in the interrogation corridor.

In claim 22, if the received response indicates that the specified memory location of the tag does not contain the selected value then it would have been obvious there is no tag having that value in the corridor.

In claim 31, **Fukuoka** discloses a method comprising interrogating tags having a selected value (check-in value or value indicating an illegal check-out) in an interrogation corridor; simultaneous receiving response from tags having the selected value; and generating an alarm if receive a response from at least one tag. Fukuoka and Stegmaier disclose simultaneous responsive to an interrogation can generate collision between tags. Therefore it would have been obvious when a collision is detected, at least one tag having the selected value (illegal indication) is present within the plurality of responsive tags and alarm should be generated.

8. Claim 34 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Fukuoka** in view of **Balch** [US 5,909,178] or **Frederick** [US 6,906,629].

In claim 34, **Fukuoka** does not discloses measuring noise floor, **Balch** or **Frederick** teaches a response in EAS system needs to validate for concern about environment noise (Balch, abstract; Frederick, col. 4, l. 51-53). It would have been obvious to an ordinary skill in the art, a measurement needs to take into account the noise factor for reliability purpose.

Response to Arguments

9. Applicant's arguments with respect to claims 1-34 have been considered but are moot in view of the new ground(s) of rejection.

Allowable Subject Matter

10. Claims 12-16 are allowed.

Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anne V. Lai whose telephone number is 571-272-2974. The examiner can normally be reached on 9:00 am to 6:30 pm, Monday to Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hofsass Jeffery can be reached on 571-272-2981. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AVL
6/14/07

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